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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,100	08/26/2003	Ta-Kyeong Lee	4611-020	3169

22440 7590 11/30/2004

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EXAMINER

JACKSON, ANDRE L

ART UNIT PAPER NUMBER

3677

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/648,100	Applicant(s) LEE ET AL.	
	Examiner Andre' L. Jackson	Art Unit 3677	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-8, 11-15 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 9, 10, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/26/2003</u> | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 3677

## DETAILED ACTION

### Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### Specification

The disclosure is objected to because of the following informalities: On page 14 of applicant's disclosure, line 17, after the word "shaft", change "126b" to read -- 126-2 --.

Appropriate correction is required.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 5-8, 11-15 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by USPAP 2004/0203522 to Lim. Lim discloses a hinge apparatus useable with a portable device comprising;

a fixed hinge part (51, 52) provided at a main body (50) and a rotary hinge part (71,62,73,74,77,78,79) to be rotated relative to the fixed hinge part, the rotary hinge part including; a power generating unit (73, 74) generating a rotating drive force; a rotary cam (77)

Art Unit: 3677

and a fixed cam (78) selectively performing power transmission of the rotating drive force of the power generating unit; a camshaft (defined by a recessed portion of a housing (62) retaining the rotary and fixed cams) assembled with the fixed cam such that the camshaft and the fixed cam are axially movable relative to each other, the camshaft being connected at an end thereof to the fixed hinge part such that an idle rotation of the camshaft relative to the fixed hinge part is prevented; and an elastic biasing member (79) provided in the camshaft to elastically bias the fixed cam and the camshaft in opposite directions.

As to claims 2, 5, 8, 11 and 15, as seen in Figs. 4 and 5, the camshaft defines parallel spaced bosses or interior walls of the camshaft assembled with the fixed and rotary cams such that the bosses and the cams are axially movable relative to one another. A boss shaft (78a) is provided at an end of the fixed cam and is received in a boss shaft slot (52a) of the fixed hinge part. A stopper (80) is formed and extends perpendicular to the bosses to prevent the elastic biasing member from excessive deformation during operation.

As to claims 18-20, the cams have different shapes, where the fixed cam includes a conical recess, which receives a conical shaped end of the rotary cam acting as a rotating axis thereof such that the cams correspond to one another.

#### **Allowable Subject Matter**

Claims 3, 4, 9, 10, 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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### Conclusion

Additional references are cited on the PTO 892 form but were not used to determine patentability of this application instead the references gave background information on folding hinge apparatuses useable with mobile devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre' L. Jackson whose telephone number is (703) 605-4276. The examiner can normally be reached on Mon. - Fri. (10 am - 6 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

André L. Jackson  
Patent Examiner  
AU 3677

ALJ

  
ROBERT J. SANDY  
PRIMARY EXAMINER